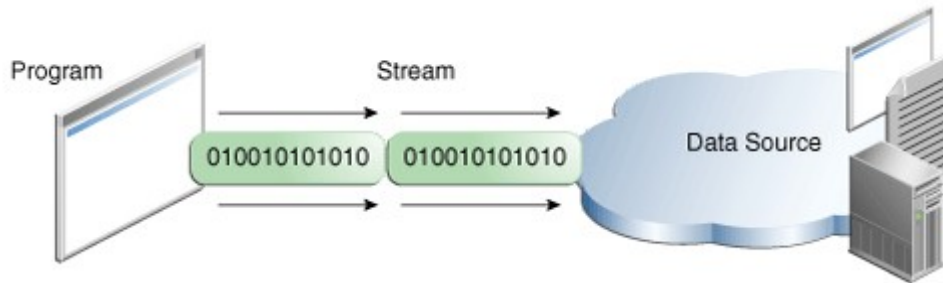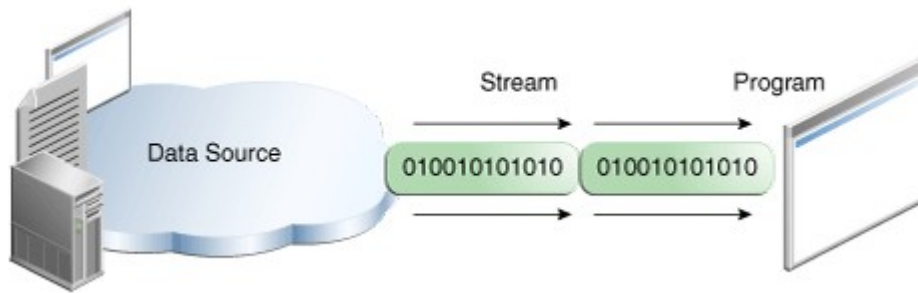# Ağ Programlama
## Soket Programlama

# Konular

- ✓ **Stream**
- ✓ **TCP Soketi**
- ✓ **UDP Soketi**

# STREAM

- ✓ Bilgi (objects, characters, images, or sounds) diskteki dosyada, ağ üzerinde bir kaynakta, bellekte ya da bir başka programda bulunabilir.
- ✓ Bilginin ardışık olarak taşınması için stream açılır.

# java.io

- ✓ Byte Streams
- ✓ Character Streams (unicode character)

## Some important Byte stream classes.

| Stream class | Description |
|---|---|
| BufferedInputStream | Used for Buffered Input Stream. |
| BufferedOutputStream | Used for Buffered Output Stream. |
| DataInputStream | Contains method for reading java standard datatype |
| DataOutputStream | An output stream that contain method for writing java standard data type |
| FileInputStream | Input stream that reads from a file |
| FileOutputStream | Output stream that write to a file. |
| InputStream | Abstract class that describe stream input. |
| OutputStream | Abstract class that describe stream output. |
| PrintStream | Output Stream that contain `print()` and `println()` method |

These classes define several key methods. Two most important are

1. `read()` : reads byte of data.

2. `write()` : Writes byte of data.

# java.io

- ✓ Byte Streams
- ✓ Character Streams (unicode character)

**Some important Charcter stream classes.**

| Stream class | Description |
| --- | --- |
| BufferedReader | Handles buffered input stream. |
| BufferedWriter | Handles buffered output stream. |
| FileReader | Input stream that reads from file. |
| FileWriter | Output stream that writes to file. |
| InputStreamReader | Input stream that translate byte to character |
| OutputStreamReader | Output stream that translate character to byte. |
| PrintWriter | Output Stream that contain `print()` and `println()` method. |
| Reader | Abstract class that define character stream input |
| Writer | Abstract class that define character stream output |

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# Socket (java.net)

- ✓ İki host arasındaki bağlantıdır.
  - ✓ Socket ile yapılan işlemler:
    - ✓ Uzak makinaya bağlantı
    - ✓ Veri alma/gönderme
    - ✓ Bağlantıyı sonlandırma
    - ✓ Bağlantı için port belirleme
    - ✓ İstekler için belirtilen portu dinleme
    - ✓ İstekleri kabul etme

# Thread

http://docs.oracle.com/javase/7/docs/api/java/lang/Thread.html
http://www.tutorialspoint.com/java/java_multithreading.htm

# Kaynaklar

- ✓ www.w3schools.com
- ✓ http://www.studytonight.com/java/java-io-stream.php
http://www.tutorialspoint.com/java/java_multithreading.htm